

What is claimed is:

1. An audio information transforming method applied to a video/audio format in which a screen includes a plurality of objects and each object has video information, position information, and audio information, said method comprising  
5 the steps of:

virtual listening point setting of setting a virtual listening point at a position different from a basic listening point that is set as a position at which a listener listens to an audio;

10 comparing of comparing a positional relationship between the basic listening point and the object with a positional relationship between the virtual listening point and the object; and

changing of changing an allocation ratio of an  
15 audio to a plurality of audio outputting means based on a compared result in the comparing step.

2. An audio information transforming method applied to a video/audio format in which each scene produced on a screen has video information, audio information, and a virtual sound source, said method comprising the steps of:

5 setting of setting a virtual listening point at a position different from a basic listening point that is set as a position at which a listener listens to an audio;

comparing of comparing a positional relationship

between the basic listening point and the virtual sound  
10 source with a positional relationship between the virtual  
listening point and the virtual sound source; and

changing of changing an allocation ratio of an  
audio to a plurality of audio outputting means based on a  
compared result in the comparing step.

3. An audio information transforming method applied to  
a video/audio format in which a screen contains a plurality  
of objects and each object has video information, position  
information, and 1-channel audio information, said method  
5 comprising the steps of:

calculating a positional relationship between a  
basic listening point, which is set as a position at which  
a listener listens to an audio, and the object; and

allocating the 1-channel audio information to a  
10 plurality of audio outputting means based on the positional  
relationship.

4. An audio information transforming method applied to  
a video/audio format in which a screen contains a plurality  
of objects and each object has video information, position  
information, and 1-channel audio information, said method  
5 comprising the steps of:

setting of setting a virtual listening point at a  
position different from a basic listening point that is set

as a position at which a listener listens to an audio;  
comparing of comparing a positional relationship  
10 between the basic listening point and the object with a  
positional relationship between the virtual listening point  
and the object; and  
allocating of allocating the 1-channel audio  
information to a plurality of audio outputting means based  
15 on a result in the comparing step.

5 . The audio information transforming method according  
to Claim 1, further comprising a step of:

adding direction information to the virtual  
listening point or the virtual sound source.

6 . The audio information transforming method according  
to Claim 2, further comprising a step of:

adding direction information to the virtual  
listening point or the virtual sound source.

7 . The audio information transforming method according  
to Claim 4, further comprising a step of:

adding direction information to the virtual  
listening point or the virtual sound source.

8 . A program product of audio information transforming  
for causing a computer to execute the procedures of:

setting a virtual listening point;  
comparing a positional relationship between a basic  
5 listening point and an object with a positional  
relationship between the virtual listening point and the  
object; and  
changing an allocation ratio of an audio to a  
plurality of audio outputting means based on a result in  
10 the comparing procedure.

9. A program product of audio information transforming  
for causing a computer to execute the procedures of:

setting a virtual listening point;  
comparing a positional relationship between a basic  
5 listening point and a virtual sound source with a  
positional relationship between the virtual listening point  
and the virtual sound source; and  
changing an allocation ratio of an audio to a  
plurality of audio outputting means based on a result in  
10 the comparing procedure.

10. An audio information transforming program for  
causing a computer to execute the procedures of:

calculating a positional relationship between a  
basic listening point and an object; and  
5 allocating 1-channel audio information to a  
plurality of audio outputting means based on the positional

relationship.

11 . A program product of audio information transforming  
for causing a computer to execute the procedures of:

setting a virtual listening point;

5 comparing a positional relationship between a basic  
listening point and an object with a positional  
relationship between the virtual listening point and the  
object; and

10 allocating 1-channel audio information to a  
plurality of audio outputting means based on a result in  
the comparing procedure.

12 . An audio information transforming device for a  
video/audio format in which a scene reproduced on a screen  
is constructed to contain objects and each object has video  
information, position information, and audio information,  
5 said device comprising:

a means for deciding a virtual listening point at a  
position different from a basic listening point that is set  
as a position at which a listener listens to an audio;

10 a means for comparing a positional relationship  
between the basic listening point and the object with a  
positional relationship between the virtual listening point  
and the object; and

a means for changing an allocation ratio of an

audio to a plurality of audio outputting means based on a  
15 result of the comparing means.

13 . An audio information transforming device for a video/audio format in which each scene produced on a screen has video information, audio information, and a virtual sound source, said device comprising:

5 a means for deciding a virtual listening point at a position different from a basic listening point that is set as a position at which a listener listens to an audio;

a means for comparing a positional relationship between the basic listening point and the virtual sound  
10 source with a positional relationship between the virtual listening point and the virtual sound source; and

a means for changing an allocation ratio of an audio to a plurality of audio outputting means based on a result of the comparing means.

14 . An audio information transforming device for a video/audio format in which a screen contains a plurality of objects and each object has video information, position information, and 1-channel audio information, said device  
5 comprising:

a means for calculating a positional relationship between a basic listening point, which is set as a position at which a listener listens to an audio, and the object;

and

10 a means for allocating the 1-channel audio information to a plurality of audio outputting means based on the positional relationship.

15 . An audio information transforming device for a video/audio format in which a screen contains a plurality of objects and each object has video information, position information, and 1-channel audio information, said device...

5 comprising:

a means for deciding a virtual listening point at a position different from a basic listening point that is set as a position at which a listener listens to an audio;

10 a means for comparing a positional relationship between the basic listening point and the object with a positional relationship between the virtual listening point and the object; and

a means for allocating the 1-channel audio information to a plurality of audio outputting means based on a result of the comparing means.

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16 . The audio information transforming device according to Claim 12,

wherein the virtual listening point or the virtual sound source has direction information.

17. The audio information transforming device according to Claim 13,

wherein the virtual listening point or the virtual sound source has direction information.

18 . The audio information transforming device according to Claim 15,

wherein the virtual listening point or the virtual sound source has direction information.